The Farmer and Planter.

PENDLETON, S. C.

Vol. VI., No. 7, : : : : : July 1855.

Land for Sale.

I have a valuable tract of land near Pendleton, that I would sell at a fair price and on accommodating terms. The tract contains 700 acres, about 300 of which is under good fence and in cultivation. This place was a few years since owned and occupied by the late venerable F. K. HUGER, by whom it was much improved and embellished. The dwelling house is large and conveniently arranged, say 100 by 45 feet, 12 or 14 rooms and 8 fire-places. Kitchen, smoke-house, dairy with a dry-well, ice-house, bathing-room, &c., all ample. In the garden, which is laid out with much taste, there is a hot-house of pisa work, a grapery and fruit of the most select varieties, with shrubbery of all kinds. The out houses are not surpassed by any in the up-country; such as stables for horses and cattle, barns, corn cribs, thrasher and cotton-gin houses, blacksmith shop, &c. Several good springs convenient. The road from this place to the village is nearly level, and one of the best carriage roads in the up-country. But if you desire to buy a pleasant and healthy residence in the up-country, in full view of a long range of mountains, and on which you may raise provisions of every kind in abundance, then come and see and judge for yourself.

☞Mr. W. J. DUFFIE, of Newberry, is an agent for the Farmer and Planter.

We have received the proceedings of the Newberry Agricultural Society, but they were too late for this issue. They will receive attention in our next.

An advertisement from the Belleville Manufacturing Company has been received, but our paper was already "made up." It shall appear in our next.

We are occasionally receiving our paper returned by subscribers who have not paid up their subscription even to the time of refusal to take. We have again to repeat to all such that *no* paper *will* be *discontinued* until all arrearages are paid—including the current volume. It is a mean practice in any man to take from the office a part of a volume and then refuse in order to avoid payment for the subcription which is due in advance, or at any rate, when he receives the first number. Such men deserve a picture in our "black list."

Polite Note.

"GREENVILLE C. H., S. C.

DEAR SIR:—You will confer a favor on T. E. W. by discontinuing his paper forever.

Yours respectfully, &c., T. E. W."

With pleasure, Mr. W.. as soon as you "forever" pay up your subscription for the present volume, six numbers of which have been sent to you. To spare you we only give your initials.—ED.

Seed Corn.

A highly respected subscriber of Chester, writes us: "I have planted all my corn with seed from the big end of the cob, and it is beginning to shoot and does not miss the stalk. You shall hear of the result after it has silked out. Present indications are favorable to the anticipation."

We shall be pleased to hear of the result from H. M., but regret he did not plant a *part* from the small end of the cob, that we might have known the difference, if any, in the result; embracing the height of the stalk, of the ear from the ground, and the product, as it is only by such comparative experiments we can arrive at any satisfactory conclusions.

The Rescue Grass.

Having in our back numbers published articles and extracts condemning the "Rescue Grass" as "worthless" a "humbug," &c. We in the present number give our readers two communications, from which it will appear that the writers, who are not only practical but most reliable gentlemen, express their satisfaction and even gratification at the result of their experiments with it. Our readers have now heard both plaintiff and defendant; the case is made up, and if they are not yet prepared to judge and decide for themselves, we would advise them to procure some of the seed and make an experiment on their own soil. It will not cost them much, as we presume the seed will be reduced in price. And now presuming that our readers will not feel greatly interested in any further discussion of the merits or demerits of the "Rescue," we shall in future, unless we receive the communication promised in our last, from a lady, decline publishing any further notice of it.

The Proper Education of the Farmer.

We have the pleasure of introducing to our readers, and especially to the members of the Laurensville Agricultural Association, a new contributor to our columns—Mr. S. DUDLEY, of Newark, N. J., who has been drawn out on reading their excellent report on the proper education of the farmer, which was published in the May number of the Farmer and Planter. With our thanks to Mr. D. for his very acceptable communication, we will take this occasion to invite him to continue his favors.

Crops and Seasons.

From almost every State in the Union, we learn from our exchanges, the wheat crop is not only good, but uncommonly so, whilst other crops prove to be equally good. With but few exceptions the seasons for the last month have been as good as could be desired. On a portion of the Red River country, up to the 22nd of May, the planters were suffering greatly for want of rain. A friend informed us a day or two since, that on a bottom field on the river of what is called "Beeswax" land, his stand of cotton on a field of some 400 acres was not sufficient for 20 acres; the stand was better on the hill land. The river so low that it might be waded by a boy, and the last year's crop of cotton all on hand, all boating being stopped. But this is almost the only exception to fine seasons, good stands, and flattering prospects ahead—and the country at large may "set to tune," and sing with joy, the following lines of "Poor Richard:"

Corn and Bacon.

The rain has come and now we hope
The price of corn will fall,
It got so high we hardly could
Afford to buy at all.

And bacon too, our friend "old Ned,"
Was each day getting higher;
'Twas fun enough for him who sold
But death on us the buyer.

But now, the rain has come and crops
Look promising enough,
Wheat, corn and oats are quite revived,
As well as garden stuff.

In view, then, of a coming crop
And hungry folks in town,
We hope to see the things we eat
Beginning to go down.

Atlanta (Ga.) Republican.] POOR RICHARD.

The Sweet Potato.

A subscriber desires to know why it is, and if it is usually so, that the seed of the potato fails to make a good stand when *cut* and planted after they have partially sprouted. In answer we cannot say that it is *invariably* the case, but know it is occasionally so from our experience. Our seed were taken from the banks about the first of April, quite sound, and laid in freshly dug up soil in order to swell and sprout them slightly before planting, which would cause them to come up early after being planted, and so save the trouble of working the land over before the plants had made their appearance. As soon as we discovered that the seed had commence sprouting, we had our land bedded up, the seed taken up and cut, dropping them as cut into large tubs of water to prevent any drying. From the tubs they were taken, dropped and covered before they became dry. The land at the time was dry, but in tolerable plowing order. The result is that we have not half a stand of potatoes; indeed almost no stand at all on one piece, which was the dryest land planted, and we are consequently compelled to make up the deficiency from a bed laid for plants intended for another piece of ground.

When the sweet potato is planted whole they are apt to grow and form what is usually called a "mother," which mother we are induced to believe, though very unnatural in a mother, robs her offspring of much nourishment that they would otherwise draw from the broad and succulent leaves of the plant. On this account we prefer cutting even if we were to put all the cuttings of one potato in the same hill, for a cutting scarcely if ever grows, but instead, perishes after throwing up its sprout.

Why it is that a potato being cut after it has commenced sprouting, is less apt to come up than one that is cut before sprouting, we are not quite certain that we can explain. We know that all bulbous roots or tubers when, perhaps just before they commence sprouting, become unusually watery, the juices seem to be in an active flowing state. Now this being the case, may it not be that the comparatively *dry* soil absorbs, sucks as it were the juices from the cut potato, and thus robs it of its vitality. We say *may it not be so*, for we do not assert it as a known fact, though it seems to us a reasonable conclusion. We have found no difficulty in getting up a potato cut *before* sprouting, nor in one planted *whole* even after sprouting, and in our most missing "patch" the present season, we think there are about as many plants as were planted unent pototoes from their being too short or small to cut. We shall in conclusion be pleased to hear from any of our readers who feel themselves "posted" on the subject of enquiry, for we must confess that we ourself want more light.

Heading Communications.

Our friends that do us the favor to write for the Farmer and Planter will oblige us, and probably better please themselves by giving what they may consider the most appropriate heading to their communications. In order to enable us to make out a correct index for future reference, every article should have a heading expressive of the subject or subjects treated of or discussed; and surely the writer of a book is better calculated to give its title than is one who may read ever so attentively.

Answers to Correspondents.

It will be seen that our old friend and neighbor, whose letter we give below, is down upon his native State especially, for the lukewarmness in the cause of the agricultural and kindred interests of the South The unaccountable apathy that prevails in our own State we believe more than anywhere else, is truly indicative of a great degree of blindness to her best interest. But we will not yet despair prospects are brightening, and we have some reason to hope for "a better time coming."

DEAR SIR:—I enclose you two dollars for the payment of the Farmer and Planter. I am sorry to hear there is a probability of it being discontinued, and solely too on the ground of a want of patronage. It indicates a perfect blindness of the South generally to their best interests, and imprints a stigma on the charatcer particularly of the Palmetto State.

It would afford me great pleasure to receive from you or some of the numerous readers of your valuable journal, some information on the subject of a disease which I believe is called Mad Itch. Is there a remedy for it? I have recently had on my farm, four or five cases of what I suppose to be this disease. and all were fatal in six or eight hours. The disease appears to be entirely in the head, neck and throat. A constant desire to scratch or rub the head and jaws on any rough object, is in a few hours succeeded by very considerable tumefaction of the mouth, but particularly the throat. The animal seems to die by strangulation.

Success to the Farmer and Planter.

Very respectfully, J. TAYLOR BROYLES.

We thank you, Major, for the expression of your good will. Such is encouraging, but can't you do something for us of a more substantial nature. A list of some 50 or a hundred new subscribers from your land of plenty, would be much more likely to buoy up our drooping spirits. But we publish your letter principally to draw out the information you desire to obtain respecting the disease in cattle which you suspect, and probably correctly, to be "Mad Itch." If any of our readers have any knowledge of the disease or a remedy for it, they will do a favor in communicating it. We have never seen a case of the Mad Itch that we now recollect, but on referring to our agricultural library, (every one should have bound and keep for future reference his agricultural papers,) we find the disease described with the cause and remedy. In vol. I, new series of the Albany "Cultivator." p 70 we find the following:

MAD ITCH.—This is a formidable and fatal disease of cattle, mostly confined te the western states, its cause hitherto considered unknown, and medical treatment almost useless. In the October no. of the Tenn. Agriculturist, we find the following, which is deserving of consideration from the fact that the disease appears, so far as we have learned, only where cattle have been fed on stalks, or where that is almost their only food, as in the west. Cattle fed on cornstalks cut in a straw cutter, do not suffer in this way.

GENTLEMEN—I know of but oue remedy for the Mad Itch, and that is surgical. Open ths second stomach and extractthe cornstalks. This fatal disease among cattle is produced by cornstalks. The fibres being indigestible, hang in the *mnaifold* or *deodenum*, and irritate and inflame until the poor animal is driven to madness. Farmers feed their hogs upon green corn; the cattle follow and pick up the stalk chewed fine by the hogs, which by superior sagacity he spits out, and this ready made article does all the mischief, and so it would serve the hogs or horses if they were to swallow it. Separate your cattle from your hogs in cornstalk chewing time, and you will separate your cattle from the Mad Itch. An ounce of prevention is worth a pound of cure. Farmer. this is the remedy.

A BELIEVER IN PROPER REMEDIES."

Since first reading the account of this disease, in which the cause is given in the extract above, we have been very careful in feeding cut corn when in roasting ear to hogs to have it done in a pen to which cattle could not have access, for we know from experience they will at times eat the chewed stalk that has been rejected by the hogs, and we have frequently heard it said that such food would kill cattle.

DISEASE OF AN OX &c.—We lost an ox under the following symptoms: He was seen in the morning rubbing his head and chin with great violence on the fence, and against trees, &c., and so continued at intervals of a few minutes, till one side of its head and chin was raw, bloody, and much swollen, when he died in the afternoon. Some said it was the Mad Itch, but knew no cause or cure. Perhaps you can tell. N. W. C.

Four Corners, Huron Co., Ohio, Jan. 1, 1844.

We do not know that the *cause* of what is called *Mad Itch* has ever been discovered. In the tenth volume of the Cultivator, page 95, it is stated, "that Mr. Simms, of Indiana, after losing several cows by this disease, succeeded in curing the remainder by the following treatment. As soon as the animal was attacked, he gave it as much soot and salt as it would eat. In a few hours he gave it from three-fourths of a pound to a pound of sulphur, and in the morning as many salts. It is the opinion of Mr. S. that sulphur alone would effect a cure, though he accompanied its action wits salts."

The State Agricultural Society.

Several extracts from our exchanges on the subject of growing interest to the agricultural classes especially of our State, will be found in our present number; and we especially call the attention of our readers to the address of the Greenwood Agricultural Society, which we have just received in time for this number. If such appeals and from such men as compose this committee, will not have the effect of arousing *every one* interested, then it is useless for us to continue to urge the pressing necessity for action. We agree *decidedly* with the committee on the place of meeting, but as to the time we do not. In the first place it will be at a very unpleasant time of the year to travel to and remain in Columbia even a very short time, especially so far as relates to the up-country delegates; and secondly, it will scarcely allow of time sufficient to organize and appoint delegates from such Districts as yet have no Societies or Associations. If the time suggested in our June No., is thought to be too late, (the first Monday in November,) then let us say one month earlier—the first Monday in October. Go to work at once, friends to the cause, in every District and Parish in the State. Get up Societies if you have none; appoint your delegates to meet in Columbia at a time to be agreed on. It will be time enough to decide at our first meeting whether the Association shall be representative or otherwise; or whether the meetings shall be held at a "fixed central point," or whether migratory. We think it unnecessary to discuss these matters at present.

A friend at Ridgeville, S. C., in sending his subscription for the Farmer and Planter with a list of new names, writes us a P. S. as below. No necessity for an apology, friend J. M. You have made ample amends—have paid us full interest for dely of payment—hope others will follow your example. We have no doubt "there are others equally devoted to the good cause with our estimable friend of St. Mathews." Many of them have already shown their devotion by their works. May all others seeing the necessity, follow the good exrmple so nobly set them.—Ed.

P. S.—I have no lawful excuse to offer for my negligence in not paying sooner, but have endeavored to make a little amends for my negligence, by not only paying my own subscription but by adding a few names more to your list. I must hope your valuable paper will never go down for the want of patronage. Surely there are others equally devoted to the good cause with our estimable friend of St. Mathews. Yours, &c. J. M.

ADDRESS,

To all and every Agricultural Society, Farmer and Planter in the State of South Carolina.

Brothers of a Common Calling:—We, the Greenwood Agricultural Society, do now earnestly and respectfully call your thoughtful attention to the subject of an Agricultural Convention to meet in Columbia on the second Wednesday of August of this year, for the purpose of founding a State Agricultural Society on a liberal, utilitarian and comprehensive scale, to meet the wants and interests of agriculture in all its details. We think the time is past to use any argument to prove the necessity of some movement for the improvement of our business and the amelioration of the soil; to look sternly and knowingly at our present condition should convince the most skeptical, and remove all fears and prejudice from the minds of all who dread innovations. There is a fearful magnitude in the destructive tendencies of our present system that requires to be met and stayed. Under this conclusion the Greenwood Agricultural Society do most earnestly call upon every Agricultural Society; every farmer and planter, and all other professions, arts and trades by your delegates to meet us in Columlumbia on the above specified day, to there work out a base work for future improvement of this great interest of the State and permanency of society.

We most respectfully ask of every newspaper in the State that feels an interest in the social condition of our people and their well-being so deeply connected with the agricultural improvement of the State, to copy this short address; let it spread the whole length and breadth of the land by the voice of the many-tongued press of the State.

By order of the Greenwood Agricultural Society.

JOHN P. BARRATT,
JAMES GILLAM,
THOS. B. BYRD, } Com.

Abbeville Dist., June 17, 1845.

State Agricultural Society.

Every thing relating to agricultural improvement, being of vital importance to our people, we beg of our readers to read and think of the following.

It Can be Done.—If it is worth while at all to found a State Agricultural Association action should be taken in the premises as soon as practicable. It is only necessary that the citizens of each district who are interested should hold a meeting at their respective Court Houses, and appoint two or more delegates to meet in convention at Columbia, some time in the month of August next, the least busy season.

The intelligent people of Columbia would welcome such a body, and do all in their power to promote its success. With this view, would it not be well for the City Council to set apart a convenient lot as the gift of the city to the agricultural interest of the State? It would cost her little; and might lead to a result more profitable to her than other resources of wealth combined.

Having secured suitable buildings at a point so accessible from all sides, and so agreeable, and a permanent fund of some hundred and fifty or two hundred thousand dollars, a State Agricultural Society will have been founded on an efficient and lasting basis. Virginia has done this at her capital, and other States did it before her; why cannot South Carolina?

If the people generally, however are not ready to take the initiatory step in this important movement, it can easily be done by the energetic societies that have long been in operation in several districts—the societies of Newberry, Anderson, Pendleton, Union, Laurens and Fairfield.

A meeting of the citizens of Abbeville will be called next sale day.—*Abbeville Banner.*

The *Carolinian* remarks as follows, of the above extract:

State Agricultural Society.—We call attention to the remarks of the *Abbeville Banner* in relation to the establishment of a State Agricultural Society. We do not know that our city authorities have any lot to dispose of for the purpose indicated, but we have no doubt that the Legislature would cheerfully donate some lands here towards this praiseworthy object. We shall sustain the project to the best of our ability.

Planters of the Pee Dee region—are the above named Districts, all that are interested in this cause!—Think of the subject and write to us your opinions.—*Darlington Flag.*

The *Abbeville Banner* suggests that a meeting

be held in the different districts and that delegates be appointed to meet in Columbia in August to form a State Society. We commend the zeal of our friends of the *Banner* for the formation of such Association; but would differ as to the means. We think such association should not be representative, but should be composed of men from every branch of industry, as many as could be induced to study their own and the interests of the State at large. Our opinion remains yet fixed that the annual meetings should not be confined to one Town or place, but must move to the different parts of the State.

The next Fair of the Newberry Agricultural Society will be held on the *third* Wednesday in September, which we would suggest as a suitable time, and Newberry a suitable place to hold a preliminary meeting for the formation of a State Society. If this proposition should meet with favor and our agricultural friends from the different portions of the State wish to send up contributions, they will be received with the greatest pleasure by the Newberry Society. At our Fairs, for several years past, contributions have been shown from nearly all the surrounding districts, and we would be pleased to see the numbers increase.

Our Fair will be sufficiently attractive to draw men from the different sections and will be a fine starting point for the formation of a State Society. What say our brethren of the Press, shall the Newberry Society, the oldest in the State, prepare for the accommodation of agricultural friends from all parts of the State. None ob-obj cting—the third Wednesday of Sept. will be the time, and Newberrythe place of meeting. —*Mirror.*

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The organization of a State Agricultural Society has ever been a favorite idea with us, and we are much pleased to find that Mr. Byrd, by his proposition in the Edgefield *Advertiser*, has induced the editors of the State to agitate the subject, thereby causing the people to think of the importance of such a society.

The question of where the first meeting shall be held seems now to be a contending point with some, but we hope our brother editors will not be too strenuous upon this immaterial preliminary, as they may be the cause of creating a dissension which would defeat the whole matter. For our part we have no particular choice between Newberry and Columbia, but we think Columbia the most proper point, as it is more centrally situated, and is accessable, at less expense, to the largest number of persons in the State.

There is but one difficulty in the way of forming the Society, and that is, who will take the initiatery step? We may write volumes on the subject, but writing is not action in the matter; the first step must be taken, and we would recommend one of the two following ways to commence with, which, in our opinion, will insure action: The officers of each District Society should meet together *at once*, and either constitute themselves delegates to such a convention, or elect other members of their society for that purpose; being careful to select such gentlemen as will attend and be efficient delegates.

But, waiving our own preferences, we endorse the proposition of the *Mirror*, that the meeting be held at Newberry C. H., on the third Wednesday in September next, during the meeting of the Newberry District Society; we think the time propituous and the place not at all objectionable.

We agree with the editors of the Newberry *Mirror*, that the yearly meetings should not be confined to one point, but, like the State Society of Georgia, should be held at different places on the *Railroads* of our State, so that the influence of its meetings, and their pecuniary advantages might be diffused to every part that is practicable, thereby creating a wide range of interest for its welfare.

Let us form the society first, and then do all that is possible to make every District and individual citizen therein feel interested in perpetuating it.

Nothing has done so much to stimulate the energies, improve the stock, increase the products and enhance the value of the lands of the farmers of Georgia, as their State Agricultural Society, and we see no reason why such beneficial results should not flow from a similar organization in South Carolina.—*Laurensville Herald.*

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In this issue may be found the article of "Fishing Creek," in reference to the proposed State Agricultural Association. We take great pleasure in laying it before our readers and inviting their attention to it. The subject commends itself very strongly to the farming portion of the State, and it should receive from them a hearty response. A meeting of the citizens of Abbeville District was called for last Monday, to take the subject into consideration. This meeting we suppose will propose a time for the assembling of the Association. We believe it is conceded on all hands that Columbia is the *place*. The Abbeville *Banner* proposes August next, as being the most suitable time.—*Chester Standard.*

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From the Chester Standard.

MR. EDITOR:—Your paper of week before last contains some editorial remarks in reference to the formation of a State Agricultural Society, and you ask, "*What say the people of our District, What say our Fishing Creek friends?*" Concurring entirely as I do in your judicious remarks in favor of such a society, I beg the use of your columns to reply on behalf of your Fishing Creek friends to the query propounded to them. I may first say, however, that without presuming to speak for the people of our District, I may nevertheless say for them with perfect confidence, that they are ready to do their part. They have never been laggarts in any useful or patriotic public enterprize, and are in all such matters "*semper parati.*"

My purpose, however, was to reply briefly to your query addressed to your Fishing Creek friends; and here I feel that I am authorized to speak directly to the point. We are ready to meet our Agricultural friends at any time and place that may be agreed upon, and unite with

them in forming a society and aiding in every practicable way to promote the Agricultural interest.

We have a flourishing Agricultural Society at work, and are ready either as a society or as individuals to give all the aid and countenance we can to the project. I think that there can be no difference of opinion as to the place of meeting, for the present at least. From its central position and convenience of access, Columbia is obviously the place. There may be some difference of opinion as to the proper time.

I would suggest either the month of September or October as most suitable. I think to accomplish the object in view and concentrate public attention on this meeting, it ought to be held at a time most favorable for the exhibition of Agricultural products, fruits, &c., as well as at a time when no other meeting is in progress to divide with it the public attention.

The objects of such a meeting are of sufficient magnitude to warrant the expectation of its being well attended without the collateral aid of the Legislative sessions or conventions and assemblages for other purposes. Indeed, I would prefer almost any other time than that of the session of the Legislature; and experience I think has shown that to be a most unpropitious season. I hope, Sir, you will again urge upon the Agricultural public the necessity of some such organization, and especially upon the Agricultural societies of the State, the propriety of their taking up the matter, fixing a time and place for the meeting and appointing their Delegates. The Fishing Creek Agricultural Society, being a Junior member of the Fraternity, would prefer following the lead of some of her elder sisters, but will not be behind any of them in zeal and labors for the common weal. Let us have a meeting of practical Agriculturists from all sections of the State, and form a working society which shall look or not only to the improvement of our Agricultural but also to the security and protection of special Agricultural interests.

FISHING CREEK.

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This subject is beginning to attract the attention of the farming community, and we hail it as a favorable omen. Agriculture has been too much neglected in South Carolina, as the woful appearance of the fields and the great deficiency in the crops will testify. Why is it that a full crop of neither corn or cotton, wheat or oats has been made for the last few years? Some will blame the seasons. but the fault lies with the farmers. Our best land has been washed away. What is the remedy? Science has clearly demonstrated that deep plowing, thorough draining, and rotation of crops will not only act as preventives, but will effect a lasting improvement in the soil. Convince men of this and they will practice it. A State Agricultural Society conducted by practical farmers, upon scientific principles, would give a powerful impetus to the farming community. Every District in the State should be represented. We hope that our Anderson friends will not be laggard in taking the initiatory step of forming an Agricultural Society, and appointing delegates to the State Society.—*Gazette and Advocate.*

For the Farmer and Planter

Rescue Grass.

MR. EDITOR:—In the last number of the Farmer and Planter you express a desire that your readers will furnish you all the information they may be possessed of in relatation to the above Grass. With your consent, I propose to hand in "*my experience*," which will shew that though it may not accomplish all Mr. Iverson claims for it, yet in the hands of some it has not been an entire failure. On the third day of last October, I planted in my garden on a plat of land 67 feet in length, by 45 feet in width, three pints of seed. The land though cleared and in cultivation for at least 30 years past—possibly much longer—was never inclosed for a garden until the winter of 1849. The soil is light, sandy clay, some 12 or 15 inches from the surface; never considered it rich enough to produce cabbage, turnips, beets, radishes, &c., all of which were planted in the old part. This square generally appropriated to the raising of corn, beans, cucumbers, &c., all of which were invariably manured in the hill. After clearing off the stalks and vines of preceding crop, the land was plowed with a turn plow, following in the same furrow with a subsoil plow—6 quarts of Plaster of Paris were sprinkled over it, and raked in, at the same time leveling the ground; the seed were planted in drills, two feet apart, no manure of any description being applied. From drought succeeding it did not make its appearance above ground for 4 or 5 weeks; when up (and I believe every seed vegitated,) it grew off slowly but steadily, assuming in a short space of time an intense green color, which it retained throughout the winter. The cold of last winter did not appear to affect it, though I have no doubt it may have retarded its growth. Much of it was in bloom, and all of it jointed during the snow, sleet and freeze the last of March, and it escaped *unhurt*. About the first of February, during a slight shower of rain, I sprinkled over it 4 quarts of Plaster of Paris. On the 15th of April it was in full bloom, and would have averaged two feet in height at least. On the 21st of May, the day on which I gathered the seed, it would have averaged from 2½ to 3 feet in height. As regards its denseness, or thickness, or property to tiller or stool, you can judge from what follows: After thoroughly cleansing the seed from all chaff and exposing them to the scorching rays of the sun for one day, I measured

and found the result as follows: Nine bushels, three pecks and seven quarts, with enough still remaining on the ground to seed it ten times over. Pikes Arithmetic says,—If 3015 (the number of square feet planted) gives 10 bushels, what will 44100* (the number of feet square in an acre?) Answer:—146 bushels, 1 peck and 1 pint. I cut down in length 10 feet of one of the rows before fully ripe, and after being thoroughly cured in the sun and remaining in the house 8 or 10 days, it weighed 2½ pounds. At that rate an acre would yield from four to five thousand pounds of as good forage as the best cured oats. The inquiry naturally suggests itself why I should have obtained such results when every one else, so far as I am informed, have been disappointed? I will give my views and they can pass for what they are worth: My land was in good heart, well supplied with vegetable matter thoroughly decomposed, and able to produce from 20 to 25 bushels of corn or 1000 pounds of seed cotton per acre. I applied a kind of manure (if manure it can be called,) and that largely, best adapted in my opinion to bring into action the fertilizing properties of the soil and to quicken and stimulate the growth of the plant. Possibly Plaster may be a *specific manure* for the Rescue Grass. I believe on lands abounding in vegetable matter, 200 lbs. of Guano applied before planting, and 3 bushels of Plaster at different times after the grain was up, would produce a like result.

For the past 8 years I have been testing on a small scale the merits of all the *blooded seeds;* my garden has been the sphere of my operations from whence very few have ever travelled to my fields. Give the Rescue Grass a fair chance, and I consider it capable of furnishing a better and more abundant winter and spring pasture than any species of rye, wheat, barley, oats, clover or grass I have ever seen. For fear that some of your readers may accuse me of having seed for sale, I will just say that I have deposited four bushels at the Drug Store of Dr. Dargan & Co., in our town, for sale at 30 cents a quart, or $2.40 cents a peck, *heaped measure*, and I have declined parting with more even at that price; having reserved enough to plant all the land that I can well appropriate to it, and test its value as a woodland pasture. I am today housing a small patch of Egyptian Oats, and when I ascertain the result you may possibly hear from me again.

Yours Respectfully,

J. M. Pitts.

June 11, 1855.

*This is the "Planters Acre" of 70 yards square. The number of square feet in an acre proper is 43560. —Ed. F. & P.

CONTENTS OF THIS NUMBER.

LIST OF PAYMENTS RECEIVED.

NAMES	POST OFFICES.		AM'T.
Jas Wingard, Lexington c. h.,	S. C.,		$1.
J F Chaplin, Beaufort, (vol. 6 and 7,)	"		2.
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Federick Rutledge, Charleston,	"		1.
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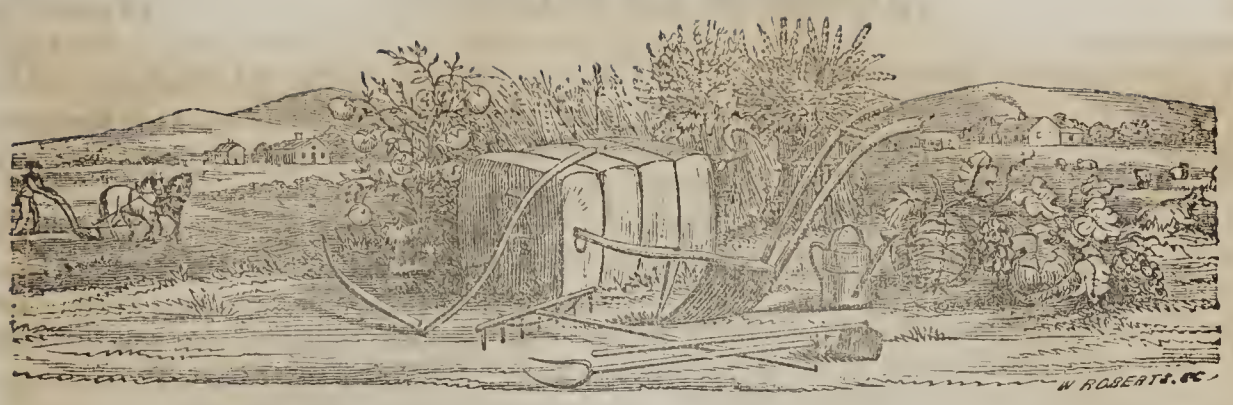
Dr E Ravinel, Charleston,	S. C.,		1.
Rev. J B Adjer, Pendleton, (vol 4 5 6)	"		3.
B F Goodlett, Sandy Flat,	"		1.

We have a number more of receipts on hand, which are unavoidably crowded out of this issue, but shall appear in our next.



THE FARMER AND PLANTER.

Devoted to Agriculture, Horticulture, Domestic and Rural Economy.

VOL. VI. PENDLETON, S. C., AUMUST, 1855. No. VIII.

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TERMS.

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For the Farmer and Planter.

How to make a Wheat House.

MR. EDITOR:—As this is now harvest time and many farmers have wheat to sun, perhaps it may not prove uninteresting to some of your subscribers to know how to make a wheat house. We will give you a description and plan of one that has been in use for the last ten years, and answers the purpose of keeping and sunning wheat most excellent. This house saves time, and you well know that it is no small matter or easy task to sun a quantity of wheat, besides, not every farmer has the means of doing it in the ordinary way. To put out in the morning on sheets, then watch it all day long, then take in at night, (and perhaps be caught in a rain at that,) is a trouble and expense that should be studied and avoided by every practical farmer. The plan we propose to give is this, (on a small scale): First, Have four corner posts eight feet long, 6 by 6 inches, the sills are let in these corner posts three feet from the ground, and are twelve feet long—the length of the house—and seven feet wide. This is all framed work, with studs three feet apart and five feet long—the depth of the house. The corner posts are set upon flat rocks, and necessary pillars placed under the sills. The plates should be a half foot longer than the sill work in order to give the flare, which will give greater force to rays of the sun. And the end plates are twice the width of the house, or even still longer, say fifteen feet, which project over in order to sustain the roof when rolled off, with an upright post at the end of each plate to support them on a level with the top of the house.

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tor. Corrosion by oxidization or rust will not injure the conducting powers of the rod.

If glass insulators are used, the bore of the insulator should be so large as to allow space for both the water of the rain and the lightning to pass through freely.

A dwelling house requires a conductor to every chimney, and if there be a cupola, that should be provided with a conductor also.

A barn fifty feet long, should have three rods, and needs but one fastening to each, and that at the ridge pole, from which point the conductor may diverge, and reach the ground several feet from the foundation of the building.

Meeting-houses having spires and bell, are more difficult to protect, as the spires are generally strengthened at the top by an iron shaft, which overcomes the rod, and discharges the lightning upon the bell, by which it is distributed. In such cases a rod should present a point under the bell.

Metal roofs should be connected with the earth by conductors, and the chimneys above the roof should have rods.

Shade trees should be provided with conductors. A shade tree affords no protection to a building against lightning.

Iron wire, of five-sixteenths of an inch in diameter, costs less than one cent per foot. Any person of ordinary capacity can ereet lightning conductors.

Buildings and vessels furnished with lightning conductors, it is thought, do not suffer from the wind; at least such is the result of my investigations thus far made.

Persons struck down by lightning should be drenched with cold water for hours; if that fail, add salt to the water, and continue the drenching. Any information in my power to give as to lightning conductors, is at the service of everybody. E. Meriam.

Baooklyn, N. Y.

Progress and Improvement.

The *Agricultural Press*, of America, is becoming powerful and popular, and undoubtedly accomplishing a vast amount of good—directly benefitting the people and the country. Its weekly, semi-monthly, and monthly issues are extensively circulated among the most enterprising and intelligent farmers in all cultivated portions of the Union. Nearly every State and Territory has at least one paper primarily devoted to the Agricultural interest, while from New York, Massachusetts and Ohio, emanate several agricultural and horticultural journals, which circulate generally—a number of them having what may be termed a national sphere and influence, their readers and correspondents extending from Maine to Minnesota, and from Canada to California.

The utility of judiciously conducted periodicals devoted to the promotion of rural interests, is no longer doubted; for the great mass of farmers who formerly ridiculed the idea of "book farming," so called, have either become convinced of their folly, or sleep with those whose practices were their chief guide, their fathers.—Throughout the land the young and middle aged, and even the venerable men now on the stage of action, very generally concede the necessity and value of the *Agricultural Press*, and cordially lend it substantial support and warm encouragement. Many a farmer who only a few years since, could not be induced to subscribe for a periodical devoted to his own business, now takes, pays for, and reads, from two to ten agricultural papers, and considers the expense a good investment. But the best and most numerous supporters and advocates of rural literature, are the young men—those who have commenced farming for themselves within five or ten years—and it is to this class that more than any or all others, the *Agricultural Press* is indebted for its elevated position, and present and prospective prosperity. But we designed to speak of the character and influence of Agricultural Journalism, rather than of its supporters. And in these respects, we conceive honor to be due our cotemporaries all over the land, for, as a general rule, our journals are able, practical and high-toned.

As a whole, though comparatively young in years, the Agricultural Press of America will suffer nothing by comparison with the organs of any other interest or profession—religious, political, literary or scientific. Indeed, we do not believe there is an agricultural paper published in this country, that is not worth far more than its subscription price to any discriminating farmer—and rarely one, which would not be both safe and valuable as a family instructor on many important subjects. Their practical and useful character is especially worthy of consideration, and affords a marked contrast with papers devoted exclusively to political topics and ephemeral reading, and instead of ranking next to political or literary journals, they ought (on the principal that the useful should be preferred to the ornamental, and business precede pleasure,) to take precedence in the estimation of every husbandman. The mission of the Agricultural journal is to inform, advise and instruct the farmer *and his family,*

(Continued on page 164.)

(Continued from page 169.)

The floor is tightly laid on suitable timbers let in the side sills, and closely ceiled that no grains of wheat can waste. This floor, you will remember, is three feet from the ground, and the body of the house should be weather-boarded down to the ground if you have any apprehension of rogues. if not, it is unnecessary. We will tell you of a circumstance with one of these wheat houses that was not weather-boarded down to the ground. Some needy soul, no doubt, wanted a bag full, and went with bag and five quarter auger in hand, got under the floor, bored a hole, fixed his bag, and soon had it full, then stopped up the hole with a corn cob, and went off rejoicing no doubt, at his *cunning* and *shrewdness*.

But, Mr. Editor, to return from this digression, to complete the building: Every house must have a roof on it. This roof is framed entirely together with scantlings of proper size, just of the dimensions of the top of the house, with rafters, &c., and tightly covered with shingles or thin plank. The roof is intended to roll off on these end plates by means of *four little wheels*, which are let in the end plates of the roof work, and has a track to run in, made by strips of plank that extend the whole length of the end plates. This completes the house. We do hope that we have been sufficiently explicit to be understood; there are, however, several small matters that should be observed, that we have thought unnecessary to give in full, for fear of prolixity that will be readily observed by any one of a mechanical turn. By rolling off this roof you can sun wheat at your pleasure. Even a person of ten or twelve years old, can, by the aid of a pole, run it off or on. The wheat should be thrown up with a shovel once or twice a day, and it will be completely sunned to the depth of four or five feet. To complete this house, the roof part should have a hasp to fit over a staple on the body of the house, and be locked tightly and securely—especially in these times of scarcity and want, pickpockets and rogues. We would also recommend that the house be situated in an open place, clear to the sun, and sit East and West that the top may roll off to the North, and the reflection of the sun on the South side of the roof proves of great advantage in this respect. Also the flare of a half foot to the body of the house gives a greater force to the rays of the sun.

You can publish this if you think it worthy, if not, commit it to the flames, and either will be satisfactory to me.

T. H. S.

REMARKS.—T H S. has our thanks for his very acceptable communication. His wheat-sunning house is very nearly such a one as we have had "in our head" for some years back, and have intended having put up the present season; but from a press of other business it has been put off too late for this years' crop. A neighbor of ours informed us a few days since he had such a house in use, which he found very convenient. Our plan is to have an upper floor on which to sun the wheat, and through holes in which to let it down when sufficiently sunned, into tight bins on each side of a passage running through the center of the lower floor. The building would necessarily have to be wider to allow, say a 3 foot passage between the bins or grain boxes, which should be of sufficient size to hold the whole crop of wheat, and with divisions for different kinds of wheat should more than one be cultivated.—ED. F. & P.

Economy in Farm Implements.

As it is in other business, so it is in farming, that true economy does not always consist in a niggardly expenditure. The rapid improvements made in the mechanic, arts, in the cotton manufacturing deparment for instance, has induced many a corporation to throw out fifty thousand worth of machinery before it was half worn out, for the purpose of introducing new processes and impoved patterns. Enormous as was the sacrifice, it was economy to make it, inasmuch as the old modes involved such an expenditure of time and labor, that manufacturing in that way would be done at a loss besides new mills running on the improved plans. Formerly the bleaching of cotton goods in England was effected by spreading them on medow lands, and exposing them to the united action of light and moisture; but at this day all the meadow lands of England would not be sufficient for the purpose.

What is true in the cotton manufacture, is true in all other departments of the mechanic arts, and in agriculture. These arts have at this day become the hand-maidens of agriculture, and a man to farm it economically and judiciously, ought to have no inconsiderable amount of mechanical and constructive skill. When the plow consisted simply of a forked stick fastened by thongs of leather to the horns of a pair of bullocks, an ignorant kind who knew nothing beyond holding on to the single handle, and following the scratch made in the soil, was sufficient for the task of the plowman. When the rude reaping-hook, of capicity to cut at a stroke only a single handful of grain, was the most complicated implement used in securing the harvest, a peasent girl would answer to perform the labor; but now that the gangplow, the cultivator, the seed drill, the horse-rake, and the grain-harvester, are among the economies of the farm, a knowlede of mechanics, sufficient to perform ordinary repairs and adjustments, is necessary for the successful operator.

A hand-rake costs but a shilling, while a horse-rake costs ten or fifteen dollars; but will any person pretend to say it is economy to reject the latter, and to retain the former? Any man can cut a crotched stick in his own forest, (if he

have a forest,) while a first-class plow costs seven to ten dollars: yet who but a Mexican or a savage, would maintain the superiority of the former on the score of economy? We are not prepared to say that it would be economical for every small farmer to puchase a grain-harvester' a thrashing-mill, or a horse-power; but it it certainly would be so for many large farmers who have neither; and it might not be a bad investment for two or more of the former class, who can agree together to own them in company. We knew a man who farmed it for years, and cut from ten to twenty acres of grass on as smooth a medow as one could wish to see, and secured it by hand, rather than go to the expense of buying a horse-rake. He shut his eyes to the palpable truth, that the extra labor of a single season would have paid for the implement. Even the labor of the farmer's daughters in raking after the cart, would have paid for the rake in five years. The item of expenditure, but perhaps more the hostility to innovation, prevented him from expending ten dollars and thereby saving hundreds.

One of the necessary results of intelligence, and a cultivation of the mind among the mass of men, is the invention of labor-saving machines, whereby one man can perform the work of hundreds; and of late years the department of agriculture is receiveing its full share of the benefits of inventive genius. It is the duty of the agriculturist to encourage these efforts, by co-operating heartily with inventors, by adopting at once, and at a liberal price, all real improvements in agricultural implements and machines, and not wait until the patent right has expired, or until the inventor, not unfrequently a poor mechanic, is compelled by his necessities to barter away his rights to some scheming speculator for a mess of pottage. It is within the memory of our young readers, when cultivators and seed-drills were considered among the doubtful experiments of the time; when grain havesters were not thought of except as the vagaries of a disordered brain; and yet the former are a part of the farm economies of even men of moderate means, and the latter are fast working their way into general use.

There are machines a farmer can do without, such as *dashing buggies, fancy sleighs, silver-plated harness*, and all the paraphernalia of an expensive luxury; but farm implements of approved patterns, in all the departments of agriculture to which he turns his attenton, are among the economies of his calling. How would a cotton manufacture thrive to-day, if he were to pick over the raw material by hand, employ a thousand girls to twirl each a single spindle, and stoutfisted men to drive the lathe and shuttle? Starvation and ruin would soon grow in the streets of such a manufacturing city. The same process of reasoning will apply to the agricultural interests. The farmer of fifty years ago will not prosper as the farmer of to-day, unless he adapt himself to the times, and adopt the impovements of the age. An abundant supply of the best agricultural implements, well used in the proper season, and well housed and secured out of it, is a certain indication of prospeity.—*Rural New York.*

From the Camden Journal.

Nut Grass.

Mr. Editor:—I see that the *Mercury* in two recent editorial articles has asserted that Nut Grass, this great enemy andp est, has never been destroyed—at least that it had never shewn satisfactorily to have been destroyed. I have done the thing, and therefore beg to deny the accuracy of the statement of the *Mercury*. I will now state how it was done.

Mr. Stephen Ellott, late President of the Bank of the State, informed us that it could be destroyed, by not permitting it to go to seed, during the growing season, which could be effected by keeping it hoed down.

Having a patch in my yard, about twenty feet square, I tried the experiment on it in the Summer of 1854. It was fully set, had been there several years, spreading, and got complete possession of the soil, and had driven out all other grasses, the earth was rather compact and rich. I hoed the patch once a week regularly, during the whole summer, begining soon after it got up, and never permitted the seed vessels to form. The hoe cut about half an inch below the surface of the earth.

The result is, that this season not one spear of the grass has come up—the ground is bare It is now the middle of June, the nuts would long since have thrown up their spires, if any were alive. I have not dug down to hunt for the nuts, but have no doubt that they are dead.

The reason of this result from the treatment, would seem to be, that by such continual cutting off the top of the plant, leaving nothing above the surface, the nut is exhausted, looses vigor and dies; possibly also that the lungs of the plant being so destroyed it cannot breath and dies. The planter treats a stump in his field on the same principal. He cuts off the young shoots during the growing season several times, and kills the stump possibly the first season, certainly the second.

This plan may not be adapted to an extensive field but by using the Scraper or "Skim-plow," I think that a planter might destroy many acres in one season, without seriously inconveniencing his work on the crop. I am well satisfied that the plan is certain and effectual, and well worth the trial of any one troubled with this pest, "Nut Grass."

You may see my naked patch, whenever you please.

DeKALB.

From the Progressive Farmer.

Why are Turnips Valuable as Winter Food for Cattle?

Mr. Editor:—There are some things in agricultural chemistry which appear to be not only wholly opposed to reason, but which facts wholly disprove. By this it is not intended to assert that the results of chemical investigations are incorrect; but simply to show that practical experience should go hand in hand with scientific research. As an instance in

point, let us take the turnip, which the distinguished chemist, Bossingault, found "the most watery root" he ever examined. By analysis he ascertained that it contained 92.5 per cent of water. Were this analysis submitted to an individual who had never tested the value of the turnip for feeding cattle, he would, in all probability, pronounce it wholly unsuited for such purposes; that the amount of nutritive matter it contained was so very small as to render it of comparatively little value. If compared in this respect with any of the different kinds of hay in general use, the difference in point of nutritious matter is so striking, that he would, upon plain common sense principles, discard the turnip, and select the hay for his stock. But if, on the other hand, his estimate of the value of turnips as a food for winter stock were derived from actual experiment, it would require faith of the strongest kind to satisfy his mind that Bossingault had not strangely erred in his analysis. Fortunately, the great "rural economist" is sustained in his research, by a host of able men, and we who are not familiar with the process by which the animal draws from such an apparently innutritious root as the turnip, so large an amount of nutrition, are left to idle conjecture, and compelled to rest satisfied with the mere knowledge of the fact that turnips *are* really valuable food for our winter stock.

In my experience, the value of the turnip crop to my stock has been very great. For many years past it has been a favorite crop with me, and as such will it continue, until I meet with something better. My stock have always thriven well upon them; and never, until during the past season, when my turnip crop was next thing to a failure, did I properly appreciate their value. Other seasons, my cattle were wintered at comparatively trifling expense and trouble, and always met the spring in fine condition. This spring, however, such was not the case. My turnips were all fed early in the winter, and during the latter part of it, I was compelled to look to other sources for their feed. It is needless to assert that at the prices of grain and hay of all kinds, this was an expensive operation. But this was not all. My cattle were in worse condition than I have ever known them in the spring, although supplied with food, containing (according to chemical analysis,) a vastly greater amount of nutritions matter than they ever received in the form of turnips before.

May we not hope that some of the learned among your readers will give us the benefit of an explanation of this interesting and important subject. R. F. G

Newcastle Co., Del.

From the Progressive Farmer.

Is your Soil Improving or Deteriorating?

I present this simple query to every farmer in the land, and ask him to ponder it in his mind. We have before us the result of calculation made in England in regard to the possibility of rendering the soil more productive than heretofore, and from it learn the surprising fact that earnest as have been the efforts of the farmers of England to bring their lands to the highest possible degree of fertility, they have not succeeded in developing more than one-half of their capability in this respect—that their soil must be made to produce as much more as it now does, before its maximum productiveness will be reached. Can this be so? There can be little doubt of it. If such be the condition of English farming, how is it with our own.

The fertility of the virgin soils of the newly settled sections of our country is a subject with which all are familiar. We have almost daily accounts of the enormous yields (with comparatively careless cultivation,) upon soils which until very recently had never been cultivated; but those whose memories extend sixty years into the past, will remember that the same fertility once characterized the deep loamy soils of our own vicinity. Where is this fertility now? Precisely where the fertility of these western new lands will be twenty years hence, if the present wasteful and improvident system of farming is continued. Year after year, we have beheld the productiveness of our lands diminishing, until now, it is scarcely a moiety of what it once was, when mother nature first resigned the exclusive control of the fertilizing department. Why is this? Is this deterioration a natural consequence, following man's attempt to cultivate the soil, or is it the improvident system of farming so generally pursued?

If the deep rich soils of the prairies, or of our own State, once yielded one 100 bushels of corn, or 40 bushels of wheat to the acre, why should not the science and skill of modern husbandry perpetuate this fertility from generation to generation. We sometimes hear of extraordinary yields from fields, which previously, were not remarkable for fertility. By what agency are they produced? Are they the result of the applied skill and science of the cultivator, or of a mere haphazard experiment, in which, by good luck, the proper fertilizers were

selected, and the most effective method of tillage pursued? Attribute it to what source we may, there is every reason for believing that what has once been accomplished in this direction, may, by the judicious use of the same means, be accomplished again, and fields, which, under particular circumstances, yielded extraordinary crops, may be made to do so again. All that is requisite, is the proper application of enterprise, skill and science. A habit of closer observation must prevail; better and more economical methods be adopted, more efficient implements used, a more judicious system of rotations of crops introduced, and by a combination of these means, the productiveness of the soil may not only be increased and maintained, but the cost of producing will not be materially greater than now.

We regard this as a most appropriate time for an investigation of the causes which led to this alarming deterioration in the fertility of our soils. Sooner or later, the examination will be forced upon us, will ye, will ye. We have ten thousand evidences around us that our system of husbandry needs reformation, and the earlier the day in which it is attempted, the lighter will be the obstacles to be overcome. The same difficulties which now threaten us, once threatened the English farmers, and not until sheer necessity—absolute ruin stared them in the face, did they commence the work of reformation. Once begun, it was nobly carried on, until the husbandry of England is the nation's boast, and the world's admiration, and yet their object is but half accomplished. Shall we defer our reforms until we can no longer avoid it, and then enter upon them, having tenfold more formidable difficulties to overcome than we should have, if commenced at once?

Were our country as densely populated as China, millions would have perished under the scarcity of the past season. The entire surplus produce of the country would not have sufficed for the absolute wants of our people. If such be the case when a portion at least of the original fertility of our lands yet remains, what may it not be half a century hence, when our population will be quadrupled, and the productiveness of our soils, judging from the past, greatly lessened? It is little less than folly "to hug the fond delusion to our bosoms," that our agricultural resources are inexhaustible. Properly managed, the soil of our magnificent country (embracing, as it does, almost every variety of climate,) ought to produce a surplus sufficient for the wants of the world: but managed as it has been, the individual is now living who may behold the day when its products will not be more than sufficient for the wants of those who occupy it. There are doubtless many who will regard this as mere croaking, but let such examine the subject, and perhaps their sentiments will undergo a change. "Under this skinning system" much of the soil of Virginia, we are told, is "worn out"—the average yield per acre in the State of New York is scarcely a fourth of what it was twenty-five years ago—Pennsylvania agriculture has scarcely suffered less, while Ohio, the "youngest giant" of the west—the El Dorado of the farmers, with her soils of almost unequalled fertility, has followed in the footsteps of her older sisters, and is today scarcely a shadow of her former self. We might multiply evidence upon evidence, but enough has been said to lead the reflecting farmer to enquire whether he is advancing or retrograding.

An Old Farmer.

Del. Co., Pa.

For the Farmer and Planter.

Dog-Law.

Mr. Editor:—It is raining to-day and I am confined to the house. From my door I can see fields of waving corn as it flourishes under the influence of refreshing rains, and contrasting the present likely prospects of crops with the past hard times and scarcity of bread stuffs, my mind was naturally raised to Heaven with humble thanks to that Being who sends the rain to the just as well as the unjust. Whilst in this contemplative mood, I took up the last number of your valuable journal, the farmer's friend, and wondered why it was, so few of my brethren welcomed it to their firesides. Not being able to solve the mystery, I continued to scan its pages until my eye rested upon an article over the signature of J. D. W. I read it, and re-read it, and passed it by—thought I would not reply. But after a second examination of it, I thought I would not be doing justice to myself not to correct some gross mistakes which he made. J. D. W. thinks F. B. has entirely digressed when he pitches in with his liquor law, &c. I ask what is the subject at issue. I refer your readers to his former article, where he gave the amount of corn consumed by the dogs, &c. Now I ask if the corn consumed by distileries to rob helpless women and children of their daily sustenance; to increase vice and immorality; to rob Heaven of immortal souls, and give to the Devil more than his dues; is not as much to the subject as his.

Again, he says if F. B. had confined himself to

his own District, it might have been taken for granted he was not a temperance man, or if he is a Greenville man, his influence does not extend very far as he would try to make people believe. Now I can inform J. D. W for his own satisfaction, that F. B. is a temperance man, nor does he think there is anything criminal about it. But as for his trying to make people believe his influence was great as a temperance advocate, he was not apprised of it, nor does he believe anybody else thought so but J. D. W., nor he would not have thought so if he had not been so prejudiced himself. He goes on farther and cast some very strong reflections on F. B. and all temperance men; all of which I bear most cheerfully. But I would politely inform J. D. W. that we are too independent a body of men to drink liquor in our societies and then try to palm it off on others, as he would try to do. I quote from his article again: "He thought he had made a large calculation of the number of dogs in one District, and thanked Mr. Editor for helping him out a little. But, lo, and behold! F. B. comes out and says there are enough of dogs to fence in all the farms, and to make bolts and locks to all your corn houses, and would rather pay tax for them than make a fence around his farm with rails." All of this I deny, and I challenge J. D. W. for proof. When I read his piece on pork, where he said—"he thought he would find in F. B.'s piece something that would beat his all hallow." I was surprised that a man of his intelligence should think his could be beat, when he thinks it rather a saving than a cost. I am sure the Kentuckians and Tennesseeans will tremble when they read his article, for it follows, as a matter of fact, if South Caraolina can raise pork on rather a "saving than a cost," she will close her markets against foreign trade. J. D. W. went on with a great harangue of wishy-washy matter about a slave and his master's saddlebags, knife, saw, ax, &c., all of which I could not understand; and finally wanted Mr. Editor to weigh his article with F. B.'s in the scale of equilebrium, and he thought there would be room enough in F. B.'s for his hogs. But I think against J. D. W.'s misrepresentations get into the scales, they will pretty well balance the hogs, unless they were like his little Irish Grazier that had given it up, but swelled to the size of 140 in five months without cost.

I like his plan for raising turnips admirably, and thought of getting seed of him as they must be something extra; but after he described them "old flat bottomed turnip, green stem with yellow blossom," I thought they must be the the same as mine, as I never saw a turnip in my life but that it had a green stem with yellow blossom.

Now, Mr. Editor, if you think this worthy of your columns insert it, and I promise all whom it may concern, I am done with this *stuff*.

F. B.

Remarks.—In justice to F. B., we publish the above, but would inform our correspondents that our paper is not the proper medium for such communications, and as they have had "lick about," we hope each will put up his weapons, and in future give us something more legitimate to the design of publication, and which, we are certain, will be more interesting to our readers.—Ed.

From the Southern Cultivator.

Protection against Lightning.

Thunder storms the present year have been frequent, and some of them fearfully active; many persons have been killed and many buildings burned or injured.

Lightning conductors affixed to buildings or vessels afford absolute protection to life and property; and as these appendages cost but a trifle, no building should be without them, and besides, the fire insurance companies of this city, (many, if not all) deduct ten per cent. from the amount of the premium of insurance on all buildings insured which are provided with lightning conductors.

In my long continued and expensive observations of lightning phenomena, I have never yet met with a case of loss of life by lightning in a building or vessel furnished with metalic lightning conductors reared for protection; nor have I ever known of a claim to be made on either marine or fire insurance companies for loss by lightning in any case where the building or vessel was furnished with lightning conductors.

I know of no case of loss of life by lightning in railroad cars, steamboats, ocean steamers, iron vessels or iron houses; evidencing that metals are not dangerous on account of supposed attraction of lightning. Metals conduct lightning and distribute it.

Iron wire of five-sixteenths of an inch in diameter is large enough for a lightning conductor. The rod should be in one single piece and filed to a sharp point, and extend two feet above the chimney or highest point of a building designed to be protected, and extend to and into the ground to the depth of permanent moisture. No paint should be put on the conduc-

(Continued on page 170.)

on essentials of every-day concernment. including questions and practices, the elucidation and discussion of which require experience, observation and good judgment. It should be the medium of communication between the best and most experienced cultivators, observers and investigators, and the great mass of agriculturists. Earnestly aiming to promote the best interests of the community, it should ever avoid and expose error and deception in every form. A desire to benefit their fellowmen—to enhance improvement, and enrich the people and the country—should be, as we trust it generally is, the paramount object of agricultural editors. With such a purpose, an energy and zeal commensurate to the work, any and every man connected with the rural Press of the country, can exercise a lasting influence upon the welfare of community. The teachings of such men as Buel, Fessenden, Skinner, Gaylord, Downing, and others, did not cease with their departure from earth—their "good deeds live after them," and will continue to benefit mankind for centuries. May their surviving cotemporaries and successors prove equally useful to their fellow men and the country—each striving to excel in promoting the good cause of rural and mental progress and improvement.—*Rural New Yorker.*

For the Farmer and Planter.

Gapes in Poultry.

Mr. Editor:—I desire to state one fact that came under my observation this spring: For several years past, the poultry in my yard, had, after reaching nearly the size of partridges, invariably taken a disease called the Gapes. Every remedy that I had heard or read of, had been resorted to with little or no success. The chicks would cease to grow, and finally die. It had been said by some that the feeding of them when young on Indian meal caused the disease by the sacharine part of the meal fermenting and breeding a small worm in the throat which crawled into the wind-pipe.

It happened this spring that just about the time the disease made its first appearance, I had some lime water on hand for medicinal purposes, and had Indian meal kneaded with the lime water, and fed them regularly on this for a a weak or more, and have continued occasionally to do so ever since. The consequence was, the disease was immediately removed, and I have never seen healthier chickens. I have raised a great number, and have had none to die from any disease.

I had previously tried the experiment of keeping lime in their water; but this, with me, had in a great degree proved a failure, I suppose from the fact that lime water exposed to the atmosphere, rapidly undergoes a chemical change, and to a great extent looses its anti-acid properties.

I would like to have your opinion of the matter. Yours, &c. D. K.

Shady Valley, Union Dist., June 16, 1855.

Remarks.—It is pretty generally admitted, we believe, by all persons who have investigated the cause, that "Gapes" is the effect of worms lodged in the windpipe; but what produces the worm is not so well settled. Our better half raises yearly a large number of chickens, as well as all other kinds of poultry usually raised in our section of country—except geese. In fact all that are used in a large family besides supplying our *full* share, though reluctantly, to roguish negroes who steal and sell to mean white people,—"no questions asked." She feeds almost entirely on Indian dough, and yet scarcely, if ever, has a case of Gapes; and hence we conclude the existence of worms in the windpipe can not be necessarily and *invariably* the effect of such food. It *may be*, however, that when the dough is fed in a sour state or to excess, so as to produce acidity and indigestion, and the consequent effects of dyspepsia as in the human system, worms in an unnatural abundance will be generated; and if so, the mixing of meal to be fed, with lime water, (a remedy itself in some cases of dyspepsia,) will ensure a *preventive* if not a *cure* of the disease. Some recommend assafœtida, some onions, &c., and others spirits of turpentine, sulphur &c., &c., either mixed with water or dough, all of which may prove beneficial. A writer, (C. F. Morton,) in the Albany Cultivator (we find the account in the Southern Cultivator for 1844,) is of the opinion, in case it actually exists, that no "particular course of feeding or medicine will reach the disease." His practice was to dislodge the worms by introducing into the windpipe a small, trimmed feather and twisting them out, as we, friend, D. K., have when boys, many a poor rabbit. This operation has been performed by others since, and propably before Mr. M. practised it. We have performed the operation successfully in more than one instance. Mr. Morton in giving rather a long account (as we are about to do,) of his observations on, and treatment of the disease, says in operating—"I found a female worm differing from others by branching off at the tail" (we have seen a representation of this somewhere—Ed.,) in a number of roots or branches, between each of which were tubes filled with hundreds of eggs, like the spawn of a fish; and although the chicken died in the morning, the worm was perfectly alive in the afternoon, and continued so for half an hour in warm water. While I was examining it in a concave glass under a microscope, it ejected one of its eggs, in the centre of which was an insect in embryo. From this fact I have come to the conclusion that when the female worm breeds in the

chicken and kills it, these hundreds of eggs hatch out in its putrid body in some very minute worm, which, probably after remaining in that state during the winter, changes in the spring to a fly which deposits its eggs on the nostril of the chicken, from whence they are inhaled and hatched out in the windpipe and become the worms I have described." This latter hypothesis of Mr. M., we think very few naturalists would be willing to subscribe to, for that a fly or worm in the two distinct states of its existence should be capable of perpetuating its species, is, we conclude, rather unnatural. We think it more *probable* that the worm itself produces the egg, from which the insect is hatched, and under favorable circumstances, probably an undue secretion of mucus in the windpipe, educed by dyspeptic deathesis of the system is nurtured and multiplied to the destruction of the fowl. These are merely our speculations, however, and may be taken for what they are worth.

Mr. Morton goes on to state:—"There is one fact connected with this disease, that it is only old hen-roosts that are subject to it. I am of opinion that where it prevails, if the chicken-houses and coops were kept clean, and frequently whitewashed with thin whitewash with plenty of salt or brine mixed with it, and those chickens that take the disease operated on and cured, or if they should die, have them burned or so destroyed that that the eggs of the worms would not hatch out, that the disease would be eradicated." And we would say in conclusion that we believe foul hen-houses and roosts are a source of many diseases in poultry. We have none. Our fowls roost in fruit and other trees—they greatly prefer in the winter evergreens, such as the wild orange, cedar, &c., as roosts—as these afford them better shelter, and screens them, in some degree, from the sight of night hawks, owls and other nocturnal prowling animals, including a certain two-legged one, which is more annoying than all others.—Ed.

To Crystalize Flowers.

The experiment is simple and can be tried without deficulty. Dissolve eighteen ounces of pure alum in a quart of soft spring water, (observing proportion for a greater or less quantity), by boiling it gently in a close tinned vessel, over a moderate fire, keeping it stired with a wooden-spatula, until the solution is complete. When the liquor is *almost* cold, suspend the subject to be crystalized, by means of a small thread or twine, from a lath or small stick laid horizontally across the aperture of a deep glass or earthern jar as being best adapted for the purpose into which the solution must be poured. The respective articles should remain in the solution twenty four hours; when they are taken out, they are to be carefully suspended in the shade until perfectly dry. When the subjects to be crystalized are put into the solution while it is quite cold, the crystals are apt to be formed so large; on the other hand, should it be too hot, the crystals will be small in proportion. The best temperature is about 95 deg. of Fahrenheit's thermometer. Among vegetable specimens this may be operated on, are the moss rose of the gardens, ears of corn, especially millet-seed, and the bearded wheat, beries of the holly, fruit of the slowbush, the hyacinth, pink, furze blossoms, ranunculus, garden daisy, and a great variety of others; in fact, there are few subjects in the vegeable world that are not eligible to this mode of preservation. The fitness of the solution for the purpose may be ascertained by putting a drop of it on a slip of grass, and seeing if it crystalize as it cools. if so, the solution is sufficiently strong. Then twist around a sprig of plant, a cinder or wire ornament of any kind, some cotton, or still better, some worsted. After being immersed as already directed, the surface of the whole will be found covered with beautiful crystalizations.

For the Farmer and Planter.

The large White Rye.

Dear Sir:—You request me to let you know about the large White Rye I sent you, &c.:

I had about a table-spoonful sent me by Mr. G. Walker, then of Augusta, and now of Charleston;—that was five years ago. I drilled it in the garden, and the second year drilled it in the field. It was then nearly destroyed one night by stock; but I saved enough to start again, and last year I raised several bushels, some of which I sent you, and gave off to others the most of it in order to let others try it, and if as good as I think it to be, then the country would receive the benefit generally.

This year I have cut a little more than an acre of it. The winter and spring was so cold and excessively dry that it, with other small grain, was injured. I am going to have some of it ground into flour, as I am convinced it will make a fine article, for it is so white. If sowed on rich land, I am satisfied it will make with us thirty bushels to the acre, and in the mountain region on strong land it would double that amount; and I know of no grain that would make more food for stock. The straw is shorter than our common rye, and I think coarser. It does not grow higher than good wheat, but still the grain is so large and white that it makes up for the want of good straw.

I had another kind of rye sent me at the same time, and about half the size and much darker. I drilled both in the same way for three years, and the other degenerated and finally went to nothing almost. This shows that it did not suit our climate, while the large White Rye retained its excellence as to size and soundness.

All rye is better for our lands than any other small grain as a retainer of the soil. It is good for winter grazing, and hardy, but cannot be grazed on poor land as it will not come out

enough, but on strong land recovers every warm spell through the winter In fact no poor land is fit to graze on in winter. It requires the strongest soil to recover in cold weather from grazing; but rye stands it best. Of course stock are not as fond of it as of barley or wheat. Barley on rich soil is the best of all grazing, but on poor soil is not worth sowing. Cotton or corn will grow better after rye than any other small grain. Oats on sandy, porous land is the greatest of all exhausters, and ought not to be sowed on such soil; but on cold, heavy soil it produces better, and rather improves it unless pastured too close after cutting. The stubble in such soil makes it more porous and dry, and fits it for cotton better than in its close, stiff state, if it is deeply prepared in the spring. Oats take more lime from the land than anything else,* the rough outer coats of the husk of the grain being composed of much lime. Hence it requires a close, damp soil, and is itself very drying. Virgil, even in his day, understood this, for in his admirable versification as to farming, he often speaks of the "arid oats." In stiff, cold, clammy soil they are a benefit, and it is in fact the only soil they ought to be sowed on. A planter may often put them in rolling hilly lands, so as to give stubble to let the lands lay out a year, and keep them from washing, and retain litter; but to recruit the lands as a grain. they are not fit. Rye, on the contrary, is a restorer, or rather not such an exhauster. It is cut earlier, and the weeds and green stuff put up to cover the lands from August suns. You get nutricious straw in rye, much better for stock in winter than oat or wheat straw; in fact wheat and oat straw is not fit for stock.† Besides you can pasture rye in the winter, and it stands it better. You get spring grazing and winter straw more than from any other grain; and if you cut it in the spring while in the full milk state, it is a fine variety for your mules when cut up at night, and is very healthy for them. I this way you get more from rye than appears from the mere grain, which is generally very light in production through our section. The black oats recently introduced into our country from Ala., is not worth anything for straw—it is short and very coarse. The grain grows low and shatters out as soon as it ripens. On good strong land it will make more than our large white oats, and the grain is heavier; but you cannot save a full crop of it well, as it shatters immediately after ripening, and unless on strong land, it is too low to cut well. But one-third of a man's crop may be ventured of it, on the best land, and I believe it will stand the winter better, and therefore can be more safely sowed in the fall than our other kinds of oats. Until those who cultivate the hilly portions of our country realize the fact that their lands will wash away unless more small grain or grasses are introduced into cultivation, it is in vain to attempt any general restoration of the lands. To talk about hill-side ditches and horizontal plowing, saving hilly lands under the constant clean and close culture of cotton, is all humbug. It may do in a regular season under moderate rains; but when these torrents fall that occasionally do come every where, then the best of ditches will fill up, and where a break is made over horizontal rows it sweeps whole acres broadcast. A man may set down in his closet and theorize about levels and about each row holding exactly its own water, &c., &c.; but then no plowing can be exactly regular, some hands will not be steady, and some rows will be deeper than others, and a root, or a stone, or a stump will knock the plow one side—and then where is the exact level? Water accumulates more in one place than another—a break is made, and from one break to another increasing in velocity and breadth until a broadside is taken occasionally, and when those tremendous rains fall in floods, no science can avert their power and force. True hill-side ditches *properly made* and horizontal plowing are essential to any plantation of hilly lands, and without them no one deserves the name of a systematic planter. But the washing spring rains require a more enlarged system added to

*According to tables of analysis given by Prof. Jas. F. W. Johnson in his lectures on the application of Chemistry and Geology to Agriculture, which we give in another column, our friend is under a slight mistake here. We know it is the opinion of a large majority of practical farmers that oats are more exhausting than other small grains; but judging from the relative proportions of their inorganic compounds as compared with other crops, we could never bring ourself to this conclusion, but rather suspect the cause of deterioration to be the *after* treatment of the land. If farmers will resolve on not pasturing their oat lands except to hogs, and to them but a very short time, we think they will find that they have entertained a wrong impression as to the very exhausting nature of the oat.—Ed.

†Cut wheat at the proper time for making most and best flour, and house it before it has been exposed to any or much rain, and the straw, if well cut up, we consider fully equal to an average quality of the corn blades usually fed to our stock. If the wheat is allowed to stand till fully ripe, as it should be for *seed only*, the straw of course does not contain so much nutriment. Oat straw is of a lighter character and less nutritious, but may be used to advantage in combination with more concentrated food, such as meal, shorts or bran.—Ed.

this. If as much small grain is sowed as corn or cotton planted, then we can preserve our lands. No man in hilly lands ought to have more cotton planted than he has small grain sowed. About one-third sowed, one-third corn and one-third cotton; in about those proportions will enable a man to keep up his lands and improve them, always letting a good proportion over thisly out after stubble. By so doing, what may be washed off in heavy rains by the close, clean culture of cotton, may be regained by the stubble and weeds upon small grain land, and all kept in good tilth. And by this system the planter can spare the grain from nearly one-third of his land in culture for sale, and keep up his stock properly. It is a great mistake to suppose the lands of the upper part of South Carolina are not as good for wheat as elsewhere. If we were to take the same pains that they do North or in Virginia, we could produce as much. Besides, wheat being their market crop, they always choose for it their best lands, and we always choose our best for cotton, and leave the worn lands for wheat and other small grain. They prepare in the summer and fall their wheat lands with plows in which they run three horses and sometimes four, and thus turn in a fine sod covered with clover. They then harrow with a four ox harrow, and then sow even and about two bushels to the acre, and plow it in with a light plow, and then roll it all with a four ox roller, and besides give it a top dressing of marl, gypsum or guano. Now if we were to do this, we could more than double our production in wheat. As it is, we sow it in a hurry in the fall, frequently without breaking the land even, or hardly scratching over the sowed grain—all rough and in any way so] as to get back to "the cotton field." The wonder is, that it makes any wheat at all. If it were not for our fine climate it would not. One acre of ground properly prepared and sowed in wheat is worth three sowed as it usually is in this country. We hear of the farmers in Western New York, and Ohio, and Virginia making twenty to thirty bushels of wheat to the acre and even more, and this discourages us. We think their country better for wheat than ours; but if we were to select the best spots, and prepare and manure it as they do, ours would in an average of years equal theirs. I have some right to speak of wheat, as I have sowed it for 25 years even as low down as I live, and have never failed to make more, a good deal, than I use. Some six or seven years ago I sent 50 bushels to the great Stone Mountain Fair of Georgia, where some 40 different lots were presented from Tennessee, Georgia and Alabama, and mine divided the prize with the Quaker wheat of Tennessee.

I afterwards sent some 75 bushes to Augusta for a prize offered by the Merchant Mills there, for the best wheat, and I took a silver pitcher although it was not washed, but was sent just as it fell from the thrasher; I thinking that it was in that way the real natural quality was to be tested. All the other wheat sent was well washed, and of course all the light grains floated off. I did not know this was to be done. I mention this as a fact connected with wheat grown this low down, the latitude nearly of Augusta, and of course wheat raised fifty miles above here in Abbeville, would do better, from what I hear. Their soil is better for it. I am told they often raise twenty bushels to the acre there and, even more. With more small grain on hilly lands and less cotton, no man could tell how our country would improve in ten years. There is a great deal of land often planted in cotton that ought never to be. The dry, warm, forward lands ought to be selected so as to give the plant a start in the spring, and it is so much easier cultivated. The cold, stiff, backward lands are so thrown back in the spring they scarcely ever recover in time to make heavy cotton. The weed in the fall looks strong and large, but the top bolls do not open; while the warm lands mature and open, and give less trouble. Whereas it is exactly the reverse with small grain. The cold stiff lands produce the heaviest grain, and they sometimes do in cotton too, but in five years out of six it is not the case. Now if we could have the discretion to make the proper selection of soil, we would do much better all round. We have great difficulties as to grasses for restoration in our hot climate and light soils. As to your "Rescue Grass," and Oregon Pea," and all that, it is shere nonsense for anything like a large business. Extensive small grain crops is what the hilly parts of our country wants. The best grass for us is our native grasses, the crow-foot, crab-grass and rye-grass. The latter grows in our creek and river lands, and heads out in the summer like our rye, or rather more like barley and about as high. It grows in thick bunches. It grows in winter and through January and February very green like forward wheat, and when you rub it in your hand it smells exactly like green wheat. Horses are fonder of it than any grass, and will go over grain, unless it be wheat, to get to it. It grows exactly when we need pasture in the spring. I have had it sowed for 15 years, and it comes every year, more or less, if you do not pasture too close. The crow-foot

and crab-grass, you know are fall grasses, but very nutritious. One of our best restorers is the common field cow-pea, and if the pea is gathered and the vine turned in, it is as good for our lands as clover is for the North, and the peas gathered will pay some of the expenses. Less land for cotton, but properly chosen as to quality, will give us about as much in production as more would do, and then enough small grain to pay expenses of plan, and a plenty of corn to feed and fatten everything; will make a farmer richer in ten years by far than to run everything into cotton and corn, barely "enough to do." At least in any country that has fixed laws, industry, economy and integrity will make any man well enough off in the geer of this world, and in this country with those qualities any man can get rich. What I mean by economy is a wise administrative economy pervading all your arrangements relating to negroes, stock, lands, crops and expenditures. I do not mean parsimony, for expenditures properly made will yield a heavy per cent. But I have extended in a hurried and incoherent manner my letter much farther than intended, and I find the mail time for closing at hand. I at first merely intended to enclose you $2 for subscription for two years; but it was raining, and I could not kill grass, so I took up time in scribbling. Very truly, F. Pickens.

Edgewood, 25th June, 1855.

A Remedy for Warts among Shanghais.—This breed of fowls is very subject to a disease resembling *warts*, and which some persons miscall *gount*. It is an excrescence which appears upon, and rapidly extends itself over the shanks; rendering the subject very inactive and unhealthy, and if not removed in time, proves fatal. The disease is speedily cured by—first, washing well the part affected with warm water and soap, wiping dry, and then smearing thickly over it, a mixture of tar and lard. The first application often effects a cure; if it does not in ten days or a fortnight after, apply the mixture a second time, and it will rarely fail.

Extract from Prof. Johnson's Lectures

On the application of Chemistry and Geology to Agriculture.

§ 3. *On the relative proportions of the inorganic compounds present in the ash of plants.*

Having thus made you acquainted with the general properties and composition of the several compound substances of which the ashes of plants consists we now advance to the consideration of the *relative proportions* in which these substances exist in the different kinds of plants usually cultivated for food.

We have seen (p. 261) that different species of plants leave very different quantities of ashes when burned;—the ashes left by different species contains also the above earthy and saline substances in very unlike proportions. This fact has already been stated generally (p. 264); we are now to illustrate it more fully, and to show the important practical deductions to which it leads.

I—OF THE ASH OF WHEAT.

According to the analysis of Sprengel, 1000 lbs. of wheat leave 11·77 lbs., and of wheat straw, 35·18 lbs. of ash, consisting of—

	Grain.	Straw.
Potash	2·25 lbs.	0·20 lbs.
Soda	2·40	0·29
Lime	0 96	2.40
Magnesia	0 90	0·32
Alumina, with a trace of Iron.	0·26	0.90
Silica	4·00	28·70
Sulphuric Acid	0.50	0.37
Phosphoric Acid	0·40	1 70
Chlorine	0.10	0.30
	11·77 lbs.	35·18 lbs.

If the produce of a field be at the rate per acre of 25 bushels of wheat, each 60 lbs., and if the straw* be equal to twice the weight of the grain, the quantity of each reaped per acre will be

Grain, 1500 lbs. } from a produce of 25 bushels;
Straw, 3000 lbs. }

so that the quantity of the different inorganic compounds carried off *from the soil of each acre* will be in the grain, ½ more than is represented in the second column, and in the straw 3 times as much as is represented in the third column.

II—OF THE ASH OF BARLEY.

A thousand pounds of the grain of barley (two-rowed *hordeum distichon*,) leave 23½ lbs., and of the ripe dry straw 52·42 lbs of ash.—This ash consists of—

	Grain.	Straw.
Potash	2·78 lbs.	1·80 lbs.
Soda	2·90	0·48
Lime	1·06	5·54
Magnesia	1·80	0·76
Alumina	0·25	1·46
Oxida of Iron	a trace	0·14
Oxide of magnesia	—	0·20
Silica	11·82	38·56
Sulphuric acid	0·59	1·18
Phospeoric acid	2·10	1·60
Chlorine	0·19	0·70
	23·49 lbs.	52·42 lbs.

If the produce of a crop of barley amount to 38 bushels of 63 lbs. each per acre, and the straw exceed the grain in weight one sixth, the weight of each reaped per acre will be about

2000 lbs. of grain, } from a produce of 38 bushels;
2300 lbs. of straw }

and the inorganic matters carried off from the soil by each will be obtained by multiplying those contained in the second column (above) by 2 and in the third by 2½.

III.—OF THE ASH OF OATS.

In 1000 lbs. of the grain of the oat are contain-

*The proportion of the straw to the seed in grain of all kinds is very variable. In wheat it is said to average twice the weight of the grain, but it is very often, even in heavy crops, 3 to 3½ times that weight.

ed about 26 lbs., and of the dry straw about 57½ lbs of inorganic matter, consisting of---

	Grain, lbs.	Straw lbs.
Potash	1·50 lbs.	8.70 lbs.
Soda	1·32	0·02
Lime	0.86	1·52
Magnesia	0·67	0·22
Alumina	0·14	0·06
Oxide of Iron	0·40	0·02
Oxide of Manganese	0·00	00·2
Silica	19·76	45·88
Sulphuric Acid	0·35	0·79
Phosphoric Acid	0·70	0·12
Chlorine	0·10	0·05
	25·80 lbs.	57·40 lbs

If an acre of land yield 50 bushels, each 54 lbs., of oats, and ⅔ds* more in weight of straw, there. Of grain 2250 lbs., } from a produce of 50 bushels
Of straw 3750 lbs. }
and the weight of the inorganic matters carried off will be equal to 2½ times the quantities contained in the second column, and 3¾ times that contained in the third column.

IV.---OF THE ASH OF RYE.

The weight of ash contained in 1000 lbs. of the grain of rye is 10½ lbs , and of the straw 28 lbs. This consists of

	Grain	Straw
Potash	5·32 lbs.	0·32 lbs.
Soda		0·11
Lime	1·22	1·78
Magnesia	0·44	0·12
Alumina	0.24	0·25
Oxide of Iron	0·42	
Oxide of Manganese	0·34	---
Silica	1·64	22·97
Sulphuric Acid	0·23	1·70
Phosphoric acid	0.46	0·51
Chlorine	0·09	0·17
	10·40 lbs.	27·93

Rye is remarkable for the quantity of straw it yields, which is often from three to four times the weight of the grain. The return in grain reaches about the same average as that of wheat. From an acre of land yielding a crop of 25 bushels, each 54 lbs., there would be reaped

Of grain 1350 lbs.; of straw 4000 lbs.;

the whole weight of inorganic matters contained in which is equal to ⅓ more than is represented in the second column, added to 4 times the weights contained in the third column.

§ 3. *To what extent do the crops most usually cultivated, exhaust the soil of inorganic vegetable food.*

A bare inspection of the tabular results exhibited in the preceding section, gives but a faint idea of the extent to which the inorganic elementary bodies are necessarily withdrawn from the soil in the ordinary course of cropping.

I. Let us consider the effect upon the soil of a still too common three years' course of cropping---*fallow, wheat, oats.* If the produce of such a course be 25 bushels of wheat and 50 bushels of oats, there would be carried from the soil every three years in pounds---

	Wheat.		Oats.		Total.
	Grain.	Straw.	Grain.	Straw.	
Potash	3·3	0.6	3·75	32·7	40·35
Soda	3·5	0·9	3·3	—	7·7
Lime	1·5	7·2	2·5	5·7	16·9
Magnesia	1·5	1·0	1·7	0·8	5·0
Oxide of Iron	—	—	1·0	—	1·0
Silica	6·0	86.0	50·0	172 0	314·0
Sulphuric Acid	0·75	1·0	0 9	3·0	5·65
Phos. Acid	0·6	5·0	1·43	0:5	7·53
					398 13

The gross weight carried off in these crops is large—amounting to about 400 lbs. It will vary, however, with the kind of wheat and oats which are grown, and may often be greater than this.* The greatest portion of the matter carried off, however—upwards of three-fourths of the whole—consists of silica; the rest of the materials are equal to

60 lbs. of dry pearl-ash,
36 lbs. of the common soda of the shops,
28 lbs. of bone-dust,
12 lbs. of gypsum,
5 lbs. of quick-lime,
5 lbs. of magnesia,—or for the last three may be substituted 33 lbs. of common Epson salts and 17 lbs. of quick-lime.

The form in which the silica may be restored to the soil in a state in which the plant can absorb it, will be considered hereafter.

Though large as a whole, the weight of each of the ingredients, taken singly, is not great; and yet it is not difficult to understand that if a constant drain be kept up on the soil year after year, and the practical farming adopted is of such a kind as *not* to restore to the soil a due proportion of *each* of the substances carried off—the time must come when, under ordinary circumstances, the soil will no longer be able to supply the demands of a healthy and luxuriant vegetation.

For the Farmer and Planter.

Management of Hogs, &c.

Mr. Editor:—Having seen in the Farmer and Planter several communications on the best and cheapest mode of raising hogs, I have not seen one telling us who must attend to them.

Is it the planter, overseer, or all hands. I should think the planter *himself*, and he alone, would be the proper one to attend personally to the calling, feeding and counting of the hogs every night. But if he thinks it too low an occupation for *him*, let him, when he employs an overseer, make it one of the considerations, that he (the overseer,) shall attend to the hogs personally. There are some overseers of my acquaintance that are faithful, honest men—men that makes their employers' interest their own; all such I have the highest respect for. But the majority, those that ride fatter horses, wear

* Of all kinds of grain, the oat gives the most variable proportion of straw, that which is obtained at one time, and in one locality, being 2 and even 3 times greater than that reaped in another.
will be reaped per acre,

finer clothes than their employers, and actually think it beneath their dignity to get off a horse to stop a hole in the fence, are no more fit to attend to the hogs than to the plantation.

You may think, Mr. Editor, that I am too severe; but I think the majority of planters *know* what I say is too true.

I attend personally to the feeding and counting of my hogs; the neighbor's negroes know it. Now what is the result. Why I never loose a hog. I have more than enough meat to do my place, and will have at least 2,000 lbs. for sale.

I have a lot of fourteen acres planted in corn and the hog-pea, which will be ripe by the first of August. I will let my hogs in this field without pulling one ear. I have also, four acres of pinders, and the same of potatoes. My hogs at this time will average over 100 lbs. You can, Mr. Editor, form some idea how they will look by *sasage* and backbone time. The hog-pea and the pinder are the best crop you can plant for your hogs. The pea will make two crops, and if you have none, when our convention meets in Columbia, I will give you some, (of course you will be there.) *(a)*

I have never been on friend Novices' plantation, or I would tell you of his doings, give you a description of his place, his stock, lands, &c. He must not take to heart the criticisms of any one. He must experiment (as he is fully able and competent to do.) give to the world his experience. We all dread "Broomsedge;" but I ask you is it not better that it should be so. We have confidence in him—his writings shows to the world that he "looks before he leaps."

I think no one can lay down a fixed rule to work cotton; different soils require different management; even the seasons make us change our manner of work. The grand secret, in my opinion, to raise cotton is to get a stand and keep it clean of "grass;" and this year has been a sad lesson to many of us that have planted too largely in cotton; though I suppose, Mr. Editor, "grass does not grow well on your clay lands,*(b)* and eodsequently you can plant largely in cotton.

Piney Woods.

July 9, 1855.

(a) We hope to be there—provided it is not forced on us prematurely—so as to defeat the object. Shall be pleased to receive some of your hog-peas.

(b) If you could have seen some of our fields since the rains set in, you would have come to a very different conclusion, friend Piney Woods.—Ed.

Preserving a Green Color in Vegetables while Cooking.—It is recommended to add a small quantity of soda to the water in which "greens" &c., are being cooked, to preserve their beautiful green color—say an even teaspoonful or less, to two quarts of water. It appears reasonable that this result should be produced, since the alkali (soda) will neutralize any vegetable acid present which would redden the green color. As the soda would most remain in the liquor, and this is thrown away, no harm can result from its use.—*Am. Agric.*

Culture of the Olive.

The communication of Mr. Chisolm, it is hoped, will attract general attention. He is one of the most careful and successful of experimenters in the Low Country of our State, and whatever he says may be relied on. The most interesting matter of his communication relates to the successful culture of the Olive, and in regard to this he affords us a gratifying conviction. Some twelve years since we received from one of the islands of our coast, a branch of an olive tree, loaded with fruit, but wilted by a killing frost in the early part of November. We have often seen the tree since, and seen abundant evidence that it thrives well in our soil, but have never had a glimpse of the ripe fruit, or any report from those who had cultiavted it. The impression had grown upon us that our severe autum frosts were fatal to its perfect maturity. We are glad to be disabused of this impression; and venture to hope that the experience of Mr. Chisolm and others will lead to the general introduction of the Olive tree into the Low Country of the State. It is a tree, which, like the Chineses Mulbery, rejoices in a light sandy soil. It would suit an extensive region of South Carolina, just above tide water.

The fruit is extensively used in three ways. It is pickled, and thus forms the most agreeable relish in the world. It is dried, and in this state is a nutricious, wholesome and pleasant articles of food. It is pressed, and the Sweet Oil of commerce is extracted. For the latter use Mr. Chisolm thinks there is not much chance of cultivating it profitably in this country. Undoubtedly he is right, if it be taken up merely as a garden or fancy culture. But whenever large fields are planted with the Olive, and all the appropriate means are used to economise the reduction of the fruit to oil, we feel sure that it may be a profitable culture for this purpose alone, where the climate is such as to insure the maturity of the fruit.

Mr. Chisolm's experience invites us to recall the attention of the public to the late importation of Olive plants from Spain, which are still in great part undisposed of. The most of these plants are in a healthy condition, and we hope the opportunity will not be lost to disseminate them widely.—*Char. Mercuryr*

Beaufort, June 11, 1855.

Messers. Editors: I perceive by a late number of your paper, that you are under the impression that the Olive will not ripen its fruit in our climate. I persume that you are informed of the state of things in Charlston; but I can assure you, from an experience of ten or more

years, that in this neighborhood it ripens its fruit fully, and I have never known any to be at all affected by frost. I have some three hundred or more trees, most of which are in bearing, and some have been for several years. The fruit begins to ripen in September, and by the middle of November, little, if any, unripe fruit can be found. My trees are of two kinds and were procured from the neighborhood of Florence, and thus far, bear fruit every year, and abundantly. Labor is too dear, and cotton too profitable, for oil making to pay, and until some great change takes place in the value of labor, or our market crops, I do not think that sweet oil will be made to any extent in the Southern State.

I have had the Jujube in cultivation for twenty years, and it grows as readily as the Spanish paper mulberry, and in the same way. It suckers freely, and the suckers grows very readily, and I believe that this is the best way of propagating it. Its foliage is quite ornamental; its flowers small, but very numerous and fragrant: and its fruit very pleasant, having the merits of a nut without being one. Beyond a tree or two, I do not think that any one would care to cultivate it. The Capers plant has proved able to stand our climate for twenty years past, and has borne fruit even in a low clay soil on the seaboard, though its favorite situation is rocky hill sides. It is propagated principally by layers, but thus far I have not succeeded in getting any layers to take, though I have never used any of the means used by nurserymen for laying, which may be the cause of my failure.

Yours respectfully, R. Chisolm.

Spare the Trees.

We have subscribers in the far-west to whom we would recommend the following extract, taken from the *Granite Farmer*. With them especially, towns are almost daily springing up. Indeed where are they not springing up? In every State where our paper circulates; even *at home*, all along our Railroads; then to our readers everywhere, we would say read the remarks on the "preservation of trees on town plats." Give the subject your timely attention, and "Spare, O, Woodman! Spare the Oaken Tree." A town or village without trees is or should be a shame to its inhabitants. We are a "late comer" to the neighborhood of our little village, "Old Pendleton," which we are sorry to say is in a distressingly denuded state. We live some two miles "out of town," own no real estate in it, and yet, we venture to say, have taken to and planted more trees in the village, than have many of its inhabitants who have "lived, moved and had their being" therein much longer than we have been honored with a place in the vicinage. Before and since the building of our "Farmers' Hall," in which every member of the Society became more or less interested, we have advocated and urged the enclosing, with a suitable light material, the public square—the sowing of grass seeds and setting out trees to "cover its naked deformity;" but we have urged in vain. A few trees (posts) have from time to time been set out by the "Council," but from the employment of incompetent persons but few have lived, and *they* are being so badly cared for that they scarcely live; and so the old town stands a mocking shame to our "not got the time"—selfishness. We mean no personalities, good friends of Old P.; but we are confined to our room by a pouring down days' rain—the grass growing distressingly apace in our corn, cotton, &c., &c.; and hence we feel somewhat desposed to be "wolfish," and to snap at anything that comes in our way, even if it be our best friend—and so the reading of the extract above referred to has brought you directly in our path, and "what is writ is writ."

But the Railroad 's a coming," and if our great anxiety for money-making don't increase in consequence, we may hope to do better yet. But to the extract. And ladies, the polite editor of the *Genesee Farmer* is moved by the same article to compliment you somewhat more flatteringly (may we say,) than have we, your "lords of creation,"—and we will snatch this occasion to add (though we know but few of you will see it unless *your* attention is called to it by others,) that it is our well made up opinion, had our Town Council all along been composed of ladies instead of gentlemen, we should have had more trees, more flowers, and more grass than we now have.

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Preservation of Trees on Town Plats.

If we mistake not, ladies of taste and sentiment are interested both in the preservation of trees on town plats and near their rural homes, and in the production of cheerful and lovely groves; and therefore we place in their department of our journal the following, copied from the *Horticalturist.—Gen. Farmer.*

In all parts of the Western States are springing up towns that grow with great rapidity. Some of these are destined to rival the Atlantic cities in population and importance; many others will become second class towns of note, while a still greater portion, though destined to an humbler rank, have still an equal interest with their more fortunate neighbors in attaining and preserving a character for pleasantness and beauty.

The sites of many of these towns are beautiful beyond description. Nature has spent centuries in growing and perfecting for their adornment, the most graceful and most magnificent forest trees. She has diversified the surface with hill, and plain, and dell; she has sent sparkling rivulets among the woods, and festooned the trees with the ivy and the grape. The oak, and the elm, and the maple, mingle their diverse beauties together, while modestly beneath their shade are to be found the less ambitious but scarcely less indispensible trees that are needed to complete the picture.

Unfortunately the founders of new towns are apt to be people who fail to appreciate sufficiently such beauties. They are men whose thoughts are bent on speculation, and who find their highest and almost only enjoyment in the rapid acquisition of wealth. They call around them to build their houses, dig their canals, and construct their railroads, a population principally of needy emigrants, transient persons,

who go to and fro with the demand for labor, and who, having no permanent interest in the place, are only anxious while they remain in it to use as little as possible of their dollar-a-day in current expenses. Among such a population a tree is of no value, except as it may be turned into lumber or firewood. Robbery of the woods is universally esteemed fair plunder, and while the Yankee is stealing from the forest its best timber, the Irish and the German laborer is cutting his fuel from the remainder, with an equal disregard of titles and of division lines.

During the present season I have occasionally spent some time in the outskirts of the town from which I write, and which is a sample of many such places. But although it has suffered severely in the manner alluded to, it is not yet so unfortunate but that, if the evil be now checked, a considerable portion of its natural adornments will remain. The front of the town is already denuded of its trees, but elsewhere, in the direction of its growth and in close proximity to its buildings, are still to be found forest trees in great variety. Magnificent oaks—the growth of centuries—have stationed themselves at little intervals in all directions about the city. These oaks, if properly appreciated, are invaluable; for they give us, ready grown, such grand old shade trees, as generations must wait for from our own planting.

A younger growth of oaks in great variety is also here to be met with. The white, the red, the black, the white swamp, the scarlet-leaved, the chestnut, the willow-leaved, and perhaps other varieties that do not now occur to me, are here to be met with, and a selection of foreign trees could scarcely be made that would give greater beauty to a place than this family of oaks. These trees are young and thrifty, and have sprung up since the Indians were driven from their hunting-grounds hereabouts, before which time the young growth was kept down by an annual burning over of the openings.

Here also are to be occasionally found the sugar and scarlet-flowering maple, and the graceful elm is scarcely ever out of sight. The Buckeye is also frequent; the honey locust throws out its long, thorny branches on all sides; the aspen is to be seen in the neighborhood of the stately ash, and now and then a mulbury, with the black walnut, the butternut, the plane and the linden complete the picture. No! not complete it, for the hickories are all about us—rugged and sturdy, but full of unpolished beauty, and deserving all the better care in their preservation where they have planted themselves, because of the impossibility of transplanting them. The button-wood, the tulip tree, and willow, are also to be found in partieular localities, and the glossy-leaved thorn, the dogwood, the cherry, the balm of Gilead, and the sassafras in others. The red cedar, that once grew along the banks of the Maumee, has unfortunately been already exterminated, and the lovers of rural beauty mourn its departure as that of a cherished friend. But the list already given is sufficient to show how profusely and variously the ornaments of nature still adorn that neighborhood.

A proper degree of care on the part of the citizens, and the protection by the city authorities of the trees standing along new streets, would give to a town thus naturally favored, a pleasant character and appearance that few places ever attain—and that too, with little trouble and less expense. It is hot necessary to plant, but only to select and save. Every citizen may build his house under the shade of noble forest trees, and every street may be lined with them in great variety and all sizes.

Insects Injurous aad Beneficial to Vegetation.—Mr. Mason Commission of Patents, has had employed Mr. Townsend Glover, an artist and naturalist of distinetion, for the purpose of investigating the habits of the insects injurous and benficial to crops; and illustrating the same with the view of deseribing them with the remedies for their diminution or destruction, and all other information on the subject, in the agricultural reports. He has recently left for Florida, where he will pass several months, studying the insects pernicious or beneficial to rice, tobacco, sugar eane, orange, and the cotton plant, and also to discover the case and remedy, if practicable, of the white rot in the live oak. Mr. Glover has been engaged during the year past in watching the operations of the rice and cotton inseets in the Carolinas, Georgia, and Alabama, the corn and grain insects of the Middle and Northern States, and the insects attacking vines and fruit trees in general, as well as numerous insects beneficial to the farmer. Many of the iusects referred to he has engraved on a stone, which are now in progress of printing, and will illustrate the next agricultural report. As this subject is one of unusual interest, and will tend to the benefit to all sections of the Union, we trust the indefatigable efforts of this gentleman will receive the hearty co-operation of the agriculturists throughout the country, and his labors be crowned with sueeess.—*Union.*

For the Farmer and Planter.

The Misrepresentation.

MR. EDITOR:—The July number of the Farmer and Planter is before us. We were not a little surprised on reading the communieation headed, "cultivation of cotton—challenge aeeepted," to find ourself referred to in no very courteous terms, even charged directly with misrepresentations. We assure your correspondent, "Novice,' that we are not in the habit of misrepresenting, and would be as far from willfully doing so, as he or any other gentleman would be. Your correspondent thinks it strange "that your readers who eriticise his pieces, should always read them wrong;" and that an individual who takes it upon himself to point out and answer the errors in another's writings, should be careful not to misrepresent it." In reply we would say to Noviee that we think before one individual undertakes to prefer the grave charge of misrepresentation against

another, he should be *very certain* that the charge is *true*. Now if we read Novices' article on "cotton culture," published in the last November number of the Farmer and Planter, "wrong," before penning the article which has given him so much offence, we have read it "*wrong*" again, to-day we have it before us, and if the legitimate inference be not that he plants his *good lands* 3 feet by 10 inches, and his *poor or common* lands 30 to 32 inches, we frankly confess that our comprehension is at fault. Why! What does he say in the article above referred to. Speaking of the cultivation of cotton, he says: "After the cotton comes up enough for a stand, which it does in five or ten days, I then commence chopping out; this is before I have sided it. I then come with the plows, and run as close to it as I can with a grab plow, or a very small, straight shovel, without having a board nailed on the foot of the plow stock. This throws some dirt to the cotton, and completely covers up the middles, if the land has been laid off the *proper distance*, which is about *three feet in good land, and* 30 *to* 32 *inches in poor land*." In continuation of the subject, he says: "For the benefit of some of your readers who have never thought of the subject, I will make a calculation of how much an acre should make if properly managed. We will take 70 rows, *three feet wide* and 70 yards long. Now on one of these rows, if the cotton is chopped out *ten inches apart*, there will be 252 stalks, and if each one of these stalks has seven bolls, there will be 1754 bolls to the row, and there being 70 rows, will make 123,480 bolls, and this allowing 100 bolls to the pound, will make 1234. Then it is in figures, and it is said that they cannot lie." It is evident that Novice was speaking of his *good lands* as the *proper distance* for them was to be 3 feet apart, and 70 rows will make an acre. His poor or common land being 30 inches apart, would require 84 rows to make an acre. In a sentence or two preceeding the one last quoted, he says: "I am now going to astonish your readers and perhaps you, by saying that *common land* with a good stand and well cultivated will make from *ten to twelve hundred pounds of seed cotton to the acre*." In his communication in the July number, accepting our "challenge," as he pleases to term our proposal, he says: "When I wrote on the culture of cotton, (referring, we presume, to the article above quoted,) I spoke of what *common land* would make with a stand, without manure. I call *common land* that which will make from three to five hundred pounds to the acre of seed cotton, be the seasons good or bad." This definition refutes the idea that he meant *common land* in his November article, for from a calculation in *figures, which cannot* "*lie*," that was to make 1234 lbs. We are here forcibly reminded of the Scotchmans definition of metaphysics: "When he that reads can-na, ken what he that writes means, and when he that writes can-na ken what he means himself."

Now, Mr. E., what were the remarks made by "one Sparrowgrass," which has so nettled your correspondent, Novice. Recollect we were commenting on Broomsedge's endorsement of Novice's communication. All we said was—"we fully agree with B. that Novice's article is a capital one; but we cannot say, like "the member from Burk: If I know my sentiments, thems they." Novice, in our judgment, plants too thickly. 3 feet on good land by 10 inches in the drill, will hardly produce "70 matured bolls" to the stalk, even of "Calhoun cotton." 70 bolls to the stalk had reference to B. and not to N. Believing from the whole purport of Novice's communication, that he planted all his good lands 3 feet by 10 inches, and our distance for our good lands (we mean up-lands,) being 3½ feet by 15 inches in the drill, it would be no trouble for each of us to select an acre, have it carefully picked out, and publish the result in the F. and P. for the information of its readers, for what it was worth. This plain, simple proposition was made on our part in good faith, and with the best feelings to a brother planter, with whom we are not even acquainted, and instead of receiving, as we had a right to expect, a courteous acceptance or rejection of our proposition, we are met with a flat denial that he had said one word about planting good land 3 feet by 10 inches, and charging us unqualifiedly with misrepresentation. Our simple proposal being construed into a "challenge," we respectfully withdraw it.

SPARROWGRASS.

Little Branch, July 5, 1855.

For the Teeth.—Dissolve two ounces of borax in three pints of boiling water, and before it is cold, add one teaspoonful of the spirits of camphor, and bottle for use. A tablespoonful of this mixed with an equal quantity of tiped water, and aplied daily with a soft brush, preseves and beautifies the teeth; it extirpates all tartarous adhesion, arrests decay, induces a healthy action of the gumes, and makes them pearly white. The best period to wash the teeth is before retiring to sleep.